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888-466-3604 | support@bosterbio.com | www.bosterbio.com

Anti-Il13 Antibody Picoband®

Catalog Number: A00077-2

About Il13

Interleukin 13 is a protein that in humans is encoded by the IL-13 gene. It is a kind of cytokine secreted by many cell types, but especially T helper type 2 (Th2) cells, which is an important mediator of allergic inflammation and disease. The IL-13 gene is mapped to 5q23-q31. IL-13 induces its effects through a multi-subunit receptor that includes the alpha chain of the IL-4 receptor (IL-4Ralpha) and at least one of two known IL-13-specific binding chains. Furthermore, this gene acts more prominently as a molecular bridge linking allergic inflammatory cells to the non-immune cells in contact with them, thereby altering physiological function.

Overview

Product Name	Anti-Il13 Antibody Picoband®
Reactive Species	Mouse, Rat
Description	Boster Bio Anti-Il13 Antibody Picoband® catalog # A00077-2. Tested in ELISA, IHC, WB applications. This antibody reacts with Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	ELISA, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Storage Instructions	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.
Host	Rabbit
Uniprot ID	P20109

Technical Details

Immunogen	E.coli-derived mouse Il13 recombinant protein (Position: P22-F131).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.

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Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.25-0.5 ug/ml, Mouse Immunohistochemistry(Paraffin-embedded Section), 2-5 ug/ml, Mouse, Rat ELISA, 0.1-0.5 ug/ml, -

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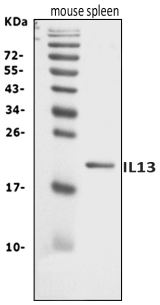
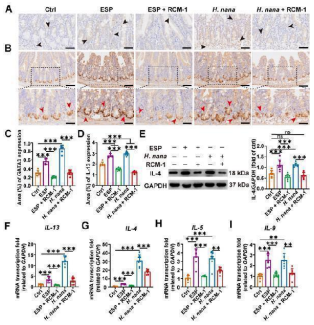
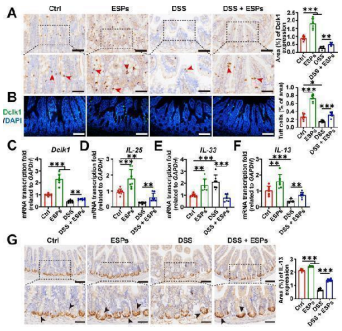
Anti-Il13 Antibody Picoband® (A00077-2) Images



Western blot analysis of Il13 using anti-Il13 antibody (A00077-2). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: mouse spleen tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Il13 antigen affinity purified polyclonal antibody (Catalog # A00077-2) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Il13 at approximately 19 kDa. The expected band size for Il13 is at 19 kDa.



RCM-1 prevents type 2 cytokines expression in mice to expel H . nana . A Representative images of IHC with GATA3 (brown highlighted by black arrowheads, scale bars 50 um). B Representative images of IHC with IL-13 (brown highlighted by red arrowheads, scale bars 100 um for the upper panel and 50 um for the lower panel). Percentages of positive-area of GATA3 (C) and IL-13 (D) were semi-quantified using Image J software. E The protein level of IL-4 (left panel) and the percentage of the relative expression of IL-4 were semi-quantified using Image J software (right panel). The relative quantifications of transcription levels of IL-13 (F), IL-4 (G), IL-5 (H), and IL-9 (I) were determined by the 2 −ΔΔCt method normalized to GAPDH . Data are presented as mean + SD for (C – I) and the right panel of (E), n = 7 per group, ** P



ESPs increase the number of tuft cells and IL-13 in the small intestine of UC mice. A Representative images of IHC for Dclk1 (brown indicated by red arrowheads in the lower panel; scale bars 100 um for the upper panel and 50 um for the lower panel) and (B) IF for Dclk1 (green) and the nucleus (4′,6-diamidino-2-phenylindole (DAPI), blue) (scale bars 100 um). Percentages of Dclk1-positive area and the number of tuft cells were semi-quantified using Image J in A and B . The transcription levels of Dclk1 (C), IL-25 (D), IL-33 (E), and IL-13 (F) were determined using the 2 −ΔΔCt method normalized to GAPDH . G Representative images of IHC for IL-13 (brown indicated by black arrowheads in the lower panel; scale bars 100 um for the upper panel and 50 um for the lower panel); percentage of IL-13-positive area was semi-quantified using Image J. Data are presented as mean + SD for the right panel of A , B , G) and (C – F). Group size of n = 7 per group. * p < 0.05; ** p

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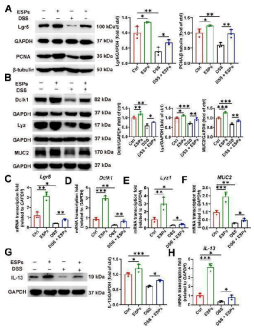
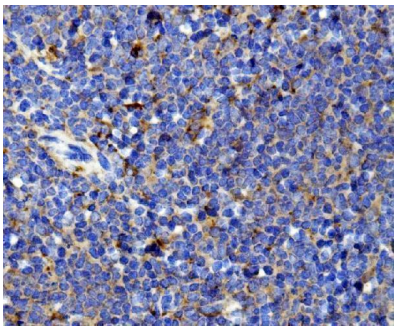
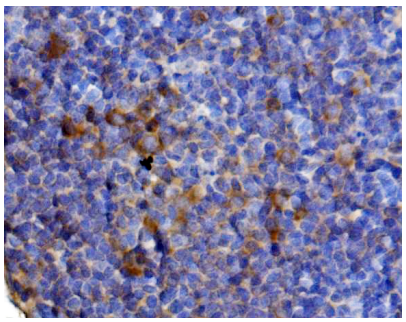
< 0.01; *** p < 0.001 Full size imageIndex in PubMed under a CC BY license. PMID: 40542404



ESPs enhance ISC proliferation and differentiation to promote intestinal epithelial regeneration and alleviate organoid damage. (A) WB results for Lgr5 and PCNA (left panel) and the relative expression levels of Lgr5 and PCNA (right panel) were semi-quantified using Image J. (B) WB results for Dclk1, Lyz, and MUC2 (left panel); the relative expression levels of Dclk1, Lyz, and MUC2 were semi-quantified using Image J. The transcription levels of Lgr5 (C), Dclk1 (D), Lyz1 (E), MUC2 (F), and IL-13 (H) were determined using the 2 −ΔΔCt method normalized to GAPDH . (G) WB result for IL-13 (left panel) and the relative expression level of IL-13 was semi-quantified using Image J. Data are presented as mean + SD for the right panels of A , B & G and C – F and H . Group size of n = 3 per group. * p < 0.05; ** p < 0.01; *** p < 0.001 Full size imageIndex in PubMed under a CC BY license. PMID: 40542404



IHC analysis of Il13 using anti-Il13 antibody (A00077-2). Il13 was detected in a paraffin-embedded section of mouse spleen tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-Il13 Antibody (A00077-2) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.



IHC analysis of Il13 using anti-Il13 antibody (A00077-2). Il13 was detected in a paraffin-embedded section of rat lymph node tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-Il13 Antibody (A00077-2) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

Anti-Il13 Antibody

For Research Use Only. Not for use in diagnostic procedures.